BENELEC

Professional Wireless Solutions

PORTABLE RADIO ACCESSORIES

2ND EDITION

WWW.BENELEC.COM.AU

BENELEC. Pty. Ltd. Unit 2/581-587 Gardeners Road Mascot NSW 2020 AUSTRALIA Telephone +61-2-9364-7000 Facsimile +61-2-9364-7099

Over 30 years of service to the radio industry

Our motto is 'Care & Effort'

Since its establishment in 1978, Benelec Pty. Ltd. has been supplying transmission components and devices and radio communication antenna systems to the professional radio communication, public safety, auto vehicle location (AVL), wireless, broadcast and defence industries for frequency bands 2MHz to 6GHz.

Antenna products and systems are designed and manufactured at the Mascot factory complex which occupies over 2,500 square meters, comprising metal and plastic parts engineering manufacturing, metal finishing plants, assembly lines, warehousing, sales and administration.

Benelec also offers its design, manufacturing and processing facilities through its industrial services division to provide solutions to industry problems for volume reprocessing, repairs, retro-fits, modifications, refinishing and repackaging.

Sales and warehousing facilities are provided through Benelec Offices in NSW, Queensland and Western Australia. Exports are handled from the NSW Branch.

A substantially developed website is hosted on the Mascot head office server and is constantly maintained and updated by in-house staff.

Benelec products have earned an enviable reputation for good design and a high quality of materials and manufacturing, underscored by better than industry average performance and durability. Starting from a high base, we consistently strive to improve our products.

At Benelec we are a team of caring members that work well together and enjoy what we do, which is to provide our customers with honest, straightforward, prompt and reliable service.

Catalogue Contents

2
H-Termination Overview

3
H-Termination Radio Adaptors

4
Commercial H-Termination Accessories

5
H-Termination Speaker Mic With Large PTT

6
Professional H-Termination Accessories

7
ORA TAC Radio Headset

8

Submersible GPS Duress Microphone

9
Direct Terminated Audio Accessories

10
Smart Hearing Protection / Optional Acessories

11
Universal Covert Base Unit

12
Covert Wireless Headset

13
DECT COM II Radio Interface

15
Submersible Bone Conduction Headset

17
Breathing Apparatus With Voice Amp

19
Breathing Apparatus Radio Headset

20
Ear Bone Microphone / Bluetooth Headset

21
Universal Rapid Charger and Cup Options

23
Radio Batteries / Antenna RF Adaptors

24
Radio Antennas / Radio Cases

25
Portable Radio Audio Termination List

H-Termination Radio Audio System

Universal Accessory Series

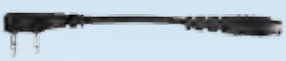
The **H-Termination Adaptor** has been designed to provide a range of universal audio accessories that are able to terminate to a wide range of radio brands and models. The H-Termination system provides mechanical strength at the termination to the radio while still providing the ability to quickly and easily change the audio accessory between shifts.

The inline plug and socket are keyed so they will only go together in one direction. To fit them, mate the two sides together and gently rotate the plug until they locate, then just push them together until they lock. To separate the plug and socket slide the outer sleeve of the plug up towards the earpiece and you should be able to pull them apart easily.

Key Benefits

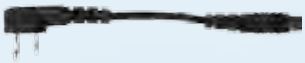
- Allows for a comprehensive range of Benelec high performance audio accessories and radio adaptors suitable for all major brands and models.
- Rapid and secure termination of accessories without affecting or damaging the radio's audio port.
- Preserves the capital investment of accessories as radio changes can now be made, and new adaptors used.
- Unsecured radio audio connections have a cable tail to provide strain relief.
- The universal interface of H-Termination can now service multi-platform radio fleets.
- Dealers can carry less stock and sell customers different radio brands with one accessory.

H-Termination Radio Adaptors

Part #	Product Image	Radio Brand	Supported Radio Models
07890 **B2**		BENELEC	BLP400 Series
		RELM	KNG Series Portables
07890 **E4**		BENELEC	BL500, BL520 Series
07890 **K1**		KENWOOD	TK-220/320, 240/340, 240D/340D, TK-208/308, 430/431, 250/350/353, TK-260/270, 260G/360G, 360/370, 270G/370G, 248/348, 2100/3100 Pro-Talk, 3101 FreeTalk XL, 2102/3102 Pro-Power

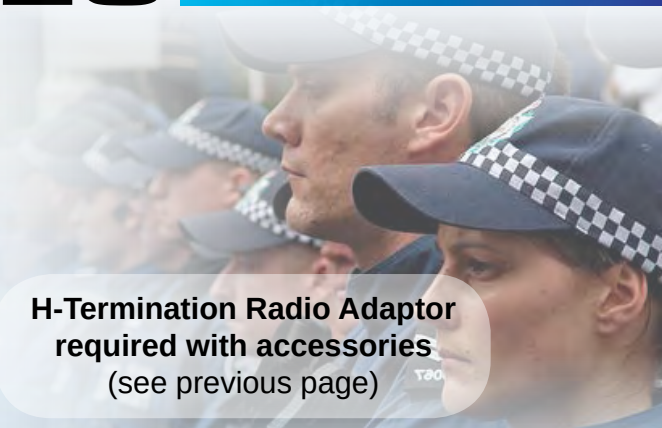
H-Termination Radio Adaptors

Continued

Part #	Product Image	Radio Brand	Supported Radio Models
07890 **K2**		KENWOOD	TK-190, TK-280, TK-380, TK-385, TK-390, TK-480, TK-481, TK-2140, TK-2180, TK3140, TK3148, TK-3180, TK-5210, TK-5400, TK-5310, NX200/300
07890 **M1**		MOTOROLA	GP68, GP88, GP300, GP308, GP350, P040, P080, P110, P1225, P1225LS, P2000, CP88, CP125, CP150, CP200, CT150, CT250, CT450, CT450LS, PRO2150, PRO3150, BPR40, EP450, MTH500, GTX, SP50, LTS2000, PR400
07890 **M3**		EFJohnson	5100, 7700 Series
		MOTOROLA	HT1000, MTX838, MTX1000, JT1000, MT2000, MTS2000, XTS3000/Astro, MTX, XTS3500, XTS5000, MT2000, MTS2000, XTS3000, GP900, MTX1000, XTS2500, MTX8000
07890 **M4**		BENELEC	BL800 Series
		MOTOROLA	HT750, HT1250LS, HT1550XLS, MTX850LS, MTX950, MTX8250LS, MTX9250, PRO5150, PRO7150, PRO9150, PRO5350, PRO5450, PRO5550, PRO5750, PRO7350, PRO7450, PRO7550, PRO7750, GP328,GP338, GP329, GP339, PTX700, PTX760, PTX780, GP320, GP140, GP340, GP360, GP640, GP680, GP1280
07890 **M5**		MOTOROLA	EX500, EX600, GL2000, PRO5150elite, PTX760plus, GP328plus, GP338plus, GP628plus, GP344, GP388
		SIMOCO	SRP9170/SRP9180
		HYT	TC-780, TC-380M/370M, TC-780M, TC-780, TC-610P
07890 **M7**		MOTOROLA	Mototrbo, XPR6300 / 6500 / 6550, APX400 / 6000 / 7000
07890 **S1**		ICOM	IC-F3, IC-F3S, IC-F4, IC-F4S, IC-F10, IC-F20, IC-H2IC-H6, IC-J12, IC-M5, IC-U12, IC-U16, IC-36FI, IC4088S, COBRA and RITRON Series
		maxon	SL25, SL55, SP-120/130/140
		uniden	UH040, UH042
		GME	TX6000, TX7000, TX670
07890 **S2**		maxon	SP120, SP130, SP140, SL25, SL55, SP300, SP310, SP320, SP330, SP340, SL55+
07890 **S3**		ICOM	IC-F3G, IC-F3GS, IC-G3GT, IC-F4G, IC-F4GS, ICF4GT, IC-F43GS, IC-F43GT, IC-F43TR, IC-F11, IC-F11S, IC-F21, IC-F21S, IC-F31
		GME	TX6100
07890 **S5**		ICOM	IC-F30GT, IC-F40GT, IC-F50, IC-F51, IC-F60, IC-F61, IC-F30GS, IC-F40GS, IC-F41G, IC-F31G, M88, M87, IC-F70, IC-F80, IC-F3061, IC-F4061, IC-F70DT, IC-F70T, IC-F70DS, IC-F70S, IC-F80DT, IC-F80T, IC-F80DS, IC-F80S, IC-F3162, IC-F4162
07890 **S6**		ICOM	IC-F3G, IC-F3GS, IC-F4G, IC-F4GS, IC-F11, IC-F21, IC-F31, IC-F33, IC-41S
07890 **S8**		SIMOCO	SRP9120, SRP9130, SRP9130 Plus
07890 **T2**		HYT	TC700
07890 **Y4**		Vertex Standard	VX-160, VX-180, VX-210, VX-210A, VX-410, VX-420, VX-426, VX-231, VX-351, VX-354
07890 **Y5**		Vertex Standard	VX820/920 Series

Commercial H-Termination Audio Accessories

With Integrated PTT



H-Termination Radio Adaptor required with accessories
(see previous page)

Speaker Mics

Medium Duty (IP54)
07812H

Heavy Duty (IP54)
07813H

07890M7 + 078511HH

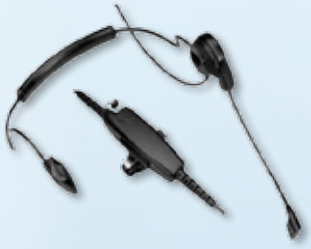
Headsets

Single Wire Surveillance Kit
078211H

Three Wire Surveillance Kit
078213H

Single Wire Flexible D
07832H

Light Weight Ear Hook
07833H



Light Weight Headset
07842H

High Noise Headset (Headband)
078511HH

High Noise Headset (Neckband)
078511NH

High Noise Headset (Hard Hat Attach.)
078511SH

H-Termination Speaker Mic

With Large Front PTT

07815H

Features

- Dual PTT (side and front mounted) options
- Front mounted tactical speaker and PTT
- Suitable for use with gloves
- Designed for use with Peltor headsets – J11 Plugs
- Dynamic mics
- Loud clear audio via front mounted speaker
- Universal H-termination for use on a wide range of radio brands and models
- IP56 environmental construction
- Heavy-duty 8-way rotating stainless clip at the rear
- Rubber coated sides for extra grip
- Protective cover for top mounted socket
- Rugged construction
- Noise cancelling options available on request

Hi Noise Headset
078513H (Headset)
078513N (Neckband)

Dynamic Light Weight Headset
07842N

Hi Noise Tactical Headset
078531H (Headband)
078531N (Neckband)

Other wiring configurations and terminations available on request

Professional H-Termination Audio Accessories

With PTT Options

1

Select Audio Accessory

Bone Conduction Headset (IP54)
07860H

Skull Mic Headset
07847H

Helmet Headset Kit
07843H

Throat Mic Headset
07841H

2

Select PTT Option

Cabled PTT

07840H

OR

Cabled + Wireless PTT

07840W XX
Choose from below

Wireless PTT Radio Options

M4	Motorola GP328 + Benelec BL800
M5	Motorola GP328 + Simoco SRP 9170
M3	Motorola XTS5000
T1	Tait 8100 Series
K2	Kenwood 2Pin
S5	Icom Mulitpin
Y5	Vertex VX820/920

Eg. 07840W **M3** (pictured)

3

Select Radio H-Termination

eg.

07890 **M3**

07890 **M5**

(see pg.4 for full list)

ORA TAC

078533H

Hearing Protection Ear Bone Mic/Radio Headset

The Benelec and Peltor 3M **ORA TAC** system offers a combination of lightweight hearing protection, ambient (tactical) listening, and the ability to communicate via two-way radios in high noise areas, without the need for a boom microphone. In addition to the in-ear headset, it also includes a push-to-talk (PTT) adapter and a quick disconnect cable.

The ORA TAC In-Ear Tactical Communications Headset delivers many wearer-friendly advantages, including:

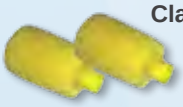
- Omni-directional reception
- No ear cups reduce weight & heat
- Fits most respirators, eyewear, face masks and helmets
- Quick radio connect/disconnect
- Moisture resistant Push-to-Talk
- Automatic protection against impact noise
- Removeable, reusable earplugs
- H-Termination to suit all radios on the market

UNIVERSAL H Radio Connector

Applications

- Aviation Mechanics
- Tactical Response
- Fire & Rescue
- Oil & Gas
- Mining

Replacement Earbuds



Class 4

Classic Disposable

0785331

Class 4

Skullscrew Reusable

0785332

Class 1

Ultrafit Reusable

0785333

Submersible GPS Duress Mic

07814G B2

Tier I P25 for BLP400 Series Radios

Features

- IP67 Microphone Housing
- Integrated Duress Button
- External Audio Port
- L1 Frequency (1575.42 MHz)
- C/A Code
- 22-Channel Continuous Tracking
- NMEA Input/Output, PPS Timing Output
- SBAS (WAAS, EGNOS, MSAS)
- aGPS Capable
- Update Rate up to 5 Hz
- Integrated Antenna Element (Omni-Directional)
- Internal 32 kHz Real-Time Clock
- Internal Low Noise Amplifier

Specifications

Update Rate	1 Hz (default), up to 5 Hz
Number of channels	22
Position Accuracy (SBAS)	<2 m 50%, <4 m 90%
Acquistion time:	
Hot start	2 s 50%
Warm start	35 s 50%
Cold start	38 s 50%
Main power supply:	
V_{cc} DC Levels	3.0 V to 3.6 V; 3.3 V typical
Consumption (current)	<43 mA
Protocol	NMEA 0183
Baud rate:	9600 (default)
Message output rate	Up to 5 Hz
Temperature:	
Operating	–40 °C to +85°C
Storage	–55 °C to +105°C
Humidity	5% to 95% non-condensing @ 60 °C
Dimensions	100x64x44mm
Weight	195g

Optional Accessories

Listen Only Acoustic Ear Tube
07811S

Ear Mould Kit
07821M

Quick Disconnect Ear Tube
07821Q

Replacement Ear Tube
07821T

Commercial Audio Accessories

Terminated For Radio Use

Speaker Mics

Termination Options:

07810 **E4**
07810 **K1**
07810 **M1**
07810 **S1**
07810 **S2**
07810 **S6**
07810 **T1**
07810 **Y4**

Light Duty (IP54)
07810X

Medium Duty (IP54)
07812E4

Termination Options:

07813 **K1**
07813 **M3J**
07813 **S6**
07813 **S5**
07813 **M5**
07813 **Y4**

Heavy Duty (IP54)
07813X

Termination Options:

07814 **B2**
07814 **E4**
07814 **M3**
07814 **M4**
07814 **M5**
07814 **M7**
07814 **T1**

Submersible (IP67)
07814X

Stock lines - other terminations available upon request (refer to p25)

Headsets

Termination Options:

078211 **E4**
078211 **K1**
078211 **M4**
078211 **M7**
078211 **S6**

Single Wire Surveillance Kit
078211X

Termination Options:

07832 **E4**
07832 **K1**
07832 **K7**
07832 **M4**
07832 **M7**
07832 **S6**
07832 **Y4**

Single Wire Flexible D
07832X

Termination Options:

07833 **E4**
07833 **K1**
07833 **M4**
07833 **M5**
07833 **M7**
07833 **S6**

Light Weight Ear Hook
07833X

Stock lines - other terminations available upon request (refer to p25)

Listen Only

Acoustic Tube M2 Terminated
07811LM3
(Pictured w/ 07813M3J)

Acoustic Tube 3.5mm Terminated
07811

Listen Only Acoustic Ear Tube
07811S
(for use /w 07814 speaker mics)

Medium Attenuation 3.5mm Headset
078515NH

High Attenuation 3.5mm Headset
078516HH

Passive Smart Hearing Protection

Ideal use with Benelec Bone Conduction Headset

3M Combat Arms Earplug

078602S Small (NSN #: 6515-01-576-8837)

078602R Regular (NSN#: 6515-01-576-8861)

078602L Large (NSN#: 6515-01-576-8869)

3M Combat Arms Earplugs (CAE) meet the demanding hearing protection needs of the police and armed forces. In the Open/Weapons Fire mode, CAE allows greater situational awareness than a common foam earplug yet helps attenuate dangerous peak levels with a filter element that reacts quickly to provide increased protection. In the Closed/Constant Protection mode, CAE protects against high-level steady noises like those in tracked vehicles and air transport. The corded version of the Combat Arms utilizes a new finger-touch rocker cover that can be operated while the earplug is in the ear.

Mode 1 - Continuous Blockout Only (30dB Attn.)
Mode 2 - Impluse Blockout Only

Optional Accessories

07821B
Ear bud kit. Large and small sizes are included.

07821Q
Quick disconnect for acoustic ear tubes.

07821T
Replacement acoustic ear tube with ear buds.

0785331
Soft, reusable earbuds.

07833F
Replacement foam (1pc) for 07833 headset.

07821M
Silicon ear mould kit. Small, Medium and Large pairs included. Long-term comfort and full situational awareness.

07821U
High noise, reusable, ultra fit ear plug set. To suit Benelec acoustic tubes. 30dB noise attenuating.

07821P
Protective pouch.
Belt loop on back.
(Dimensions: 17cm X 13cm)

0785334
Torpedo earbuds.
Long-term comfort and full situational awareness.

Universal Covert Base Unit

For Motorola XTS Series Portables

The Benelec 078484WM3 is a covert inductive system complete with wireless PTT for use with 07848 wireless earpieces in a covert surveillance role. The base unit comprises of a radio specific connector, a wireless receiver module (with in-built PTT), a wireless Keyfob PTT and Lemo plug for attachment of TRX inductors.

- Choice of inductive neckloop, flat-pack or flexible inductors are available with built in microphone and Lemo connector to attach to CBU, providing field plug and play options
- The covert car key PTT provides PTT and Tones as standard – alternative programmable options available for some radios

Interchangeable Inductive Receiver Options

Inductive Flatpack
078481L

(Savox TRX/PACK)

Inductive Neckloop
078482L

(Savox TRX/LOOP)

Flexible Inductor
078483L

(Savox TRX/FLEX)

Subminiature Wireless Earpiece
07848

(Savox RCR-6)

Specifications

- Weight: 150g
- Cable length:
  Connector - Transition Module: Radio specific
  Transition Module - Lemo: 150mm
  Loop Inductor - Lemo: 150mm
  Flatpack Inductor - Lemo: 300mm
  Flex Inductor - Lemo: 300mm
- Connector: Radio specific
- Colour: Beige only

Universal Covert Base Unit
078484WM3

This solution can be developed for other brands and models on request

Covert Wireless Headset

For Motorola XTS Series Portables

07848 Subminiature Wireless Earpiece (Savox RCR-6)

The Benelec 07848 is a squelched covert wireless earpiece for use in a covert surveillance environment.

Features

- Digital Wireless Earpiece
- Squelch - Reduces Interference
- Automatic Gain Control
- Low Battery Indicator

Specifications

- Weight: 1.2g (including battery)
- Typical Battery Life: >100 hours
- Output SPL: 100 dB
- Colour: Brown or Beige

Actual Size

Inductive Receiver Options

Inductive Flatpack

078481M3

(Savox LEP120)

Features:

- Inductive flatpack with built-in microphone
- Separate barrel style PTT
- Can be upgraded to provide tone generation for use in place of speech

Inductive Neckloop

078482M3

(Savox LEP110)

Features:

- Inductive neckloop with built-in microphone
- Separate barrel style PTT
- Can be upgraded to provide tone generation for use in place of speech

Flexible Inductor

078483M3

(Savox LEP130)

Features:

- Flexible receive-only inductor
- Supplied with mesh cloth cover

This solution can be developed for other brands and models on request

DECT COM II

Full Duplex Wireless Intercom Radio Interface

Benelec's 3M Peltor **DECT COM II** is a wireless intercom system operating in the 1.8 GHz licence-free DECT frequency spectrum. The system allows up to nine users to communicate in a full duplex conference mode, with the potential to expand to 90 additional listeners who have the ability to join the conference at any time.

In development of the DECT-Com II, Peltor worked closely with industrial and mission-critical users to determine what they needed for improved team based headset solutions for a variety of environments. As a result, the DECT-Com II provides users with new levels of comfort, clarity and full duplex team-based communications. A unique feature is the ability to connect to an existing two-way radio system for interoperability and cross-team communications.

DECT-Com II users can PTT and instantly talk to any digital or analog on-site radio system. DECT-Com II can be configured for multi-groups and customised for a variety of operational scenarios.

System Diagram Example

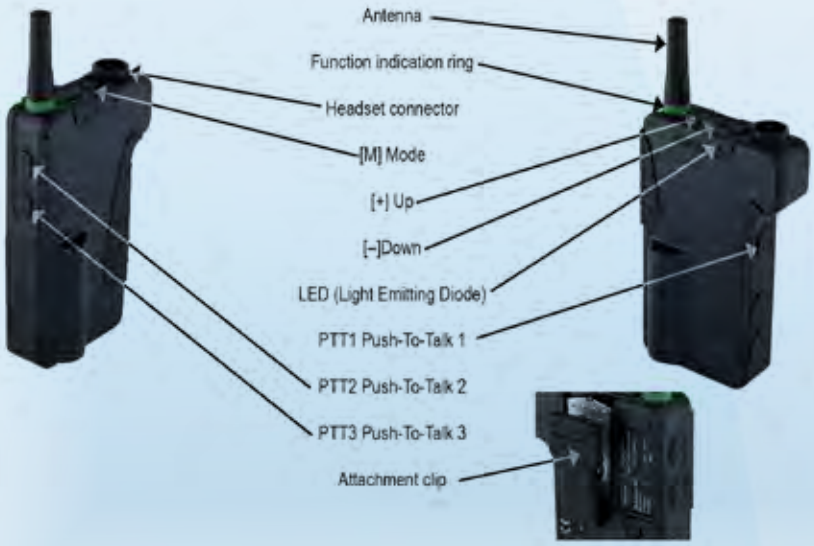
Features

- Full duplex communication for up to 9 team members (short range, high frequency)
- More than 90 additional units with “listen-only” status able to join the conference at any time
- Ability to split conference into 3 conference groups
- Ability to connect additional wireless two-way communications systems to the conference group via an in-built Push to Talk (PTT) interface
- “All Call” capability to broad simplex message to all groups via Base External Station
- Communication is secure by initial authentication and frequency hopping
- Compact design and rugged construction to suit most heavy industrial and emergency services environments
- Menu driven push-button controls for all user functions
- Headset port - Peltor standard J11 connector
- Additional external battery carrier option for extended use
- External Antenna - option for connecting to omni-directional vehicle antenna

Applications

- Rural & Metro Fire Service
- Industrial Work
- TV Studios
- Theatre
- Coast Guards
- Airport Ground Crew
- Sporting Events
- Search & Rescue

Functions



Accessories

External Battery Carrier
0785593

Rechargeable Battery
0785594

Charger / Holder
0785595

Submersible Bone Conduction Headset

07860X/XY For Single/Dual Radio Use

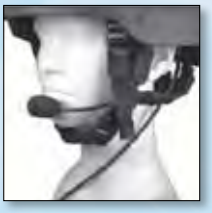
The Benelec Submersible Bone Conduction Headset employs speakers which offer a technical base for hearing voices and sounds directly through the skull bones. When we hear voice and sound normally, voice and sound waves enter the ear and strike the eardrum, which converts the air vibration into physical vibration, and conveys that vibration to the snail shell-shaped auditory organs. However, the Benelec bone conduction speakers not only enables people to clearly catch the environmental sounds when they are using these devices, but also enables sounds to reach auditory organs without passing through the eardrum but passing through the bone structure.

Loud clear audio is supplied through the Bone Conduction elements which are positioned in front of the ear. The Noise cancelling boom microphone when placed in front of the mouth will eliminate ambient sound and directly access clear voice audio from the user.

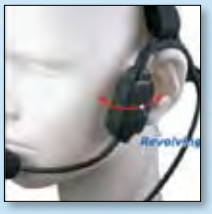
Adjustable straps above and behind the headset make the headset suitable for all head shapes and sizes. **The Benelec Submersible Bone Conduction Headset** allows helmets to be used without interference from the headset.

Suitable For:
- Life Saving IRB
- Jet Skiing
- Commercial Boating
- Naval, Customs Operations

IP67 Rated
Capable of withstanding water immersion up to 1 metre for 30 minutes.



Suitable for use with various helmets.



Revolving speaker element for superior fitting to face contours.

Light-weight comfortable tactical headset, suitable for long-term use.

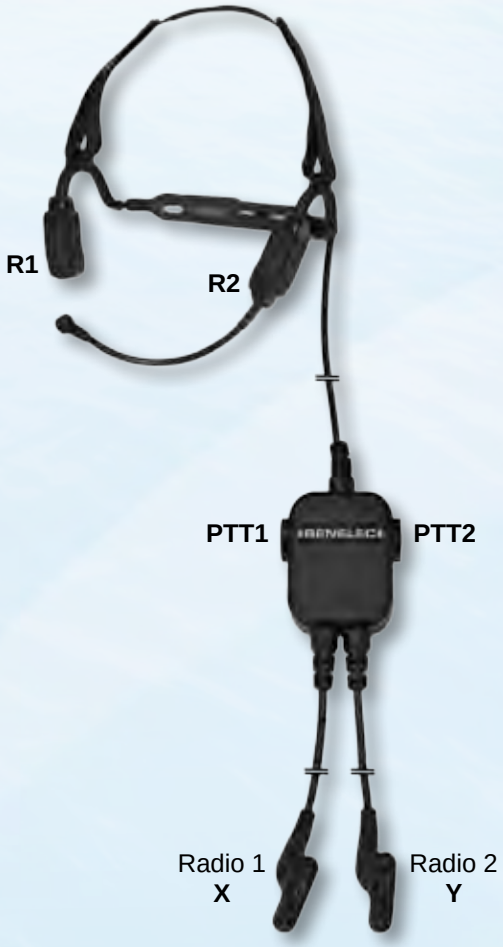
Bone Conduction Element sits directly in front of the ear.

Noise Cancelling Microphone for high noise environments.

07860X - Single Radio

Order number e.g. 07860 **Y5** (pictured).

07860XY - Dual Radio



Order number e.g. 07860 **Y5 Y5** (pictured).

Optional Wireless PTT
(Factory fitted on request)

Supported Portable Radios (X / X or Y)

B2	Benelec BLP400 Series
E4	Benelec BL500
M3	Motorola XTS5000 / EFJ51SL
M4	Motorola GP328, Benelec BL800
M5	Motorola GP628 Plus, Simoco SPR9170/80
M7	Motorola Mototrbo
Y5	Vertex VX820/920
S5	Icom ICF50/60
T1	Tait TP8100

Heavy Duty PTT Clip
(Included with each headset)

Other radio types made to order. Mixed radios are possible for XY.

Breathing Apparatus Radio Headset & Voice Amplifier

For Benelec BLP400 Series Portables

BA Radio Headset
07864W

Quick Connect IP57 Interface

Voice Amplifier
07818B2

BLP400 Portable Radio

Features

- Integrated Bone Conduction BA Headset
- Front Mounted PTT/Audio Rx/Tx on Radio
- Amplified Voice up to 84dB
- Volume, ON/OFF Controls
- IP57 Rated Solution
- Powered by 3 x AA Alkaline Batteries
- FM Approval (optional)
- Ultra Rugged Design
- Voice Amplifier Suitable for Most Masks

Applications

- CBRN/WMD
- Bio-Chemical
- Decontamination
- Hazmat Control

With Benelec's latest development of the vibration-type bone conduction mic (VSCM) and high output bone vibration speaker, the Breathing Apparatus Radio Headset ensures clear transmission even with the mouth covered by a mask, or in extreme noise environments.

It can be fitted to a wide variety of BA masks, and since it does not cover the ears, it allows the user to hear ambient sounds in high risk environments for increased safety.

In addition, the Voice Amplifier incorporates the functionality of a portable two-way radio accessory into the same housing. It features a combination PTT Switch and Speaker Grill (patent pending) to provide the user with quick and easy access to their radio network. The unit can operate with virtually any make or model of portable radio.

It incorporates multiple glands, seals and gaskets into the carbon filled polycarbonate housing so the unit can be washed, decontaminated and withstand heavy use. Standard features include on/off/volume control knob, visual dual colour power/low battery indicator LED, unique Benelec accessory quick connect, molded in Lanyard attachment point, 360 degree swivel belt clip, and Captive battery housing thumbscrews.

The Voice Amplifier is powered by three standard 'AA' batteries and will operate for up to 48 hours (batteries included). Moreover, it includes a fail safe feature, whereby the portable radio function continues to operate when the batteries that power the voice amplifier are completely drained.

This solution can be developed for other brands and models on request

Voice Amplifier Features

- Large Speaker & PTT
- Volume Control
- Fail Safe Operation
- Revolutionary Throat Mic Design
- Versatile Hearing Accessories
- Loud & Clear Voice Amplification
- Powered by 3 AA Batteries
- Low Battery Indicator
- Survives all weather conditions
- Easy to locate Speaker & PTT
- Use with any Make or Model of
- Facemask or Breathing apparatus
- Connects to most make/model radios
- Waterproof & Dust Tight
- 48 hours of Operating Time

Voice Amplifier Specifications

Mic Type	Interchangeable
Speaker Material	Mylar
Speaker Freq Response	450 Hz to 9 kHz
Push to Talk	Tactile
Self Powered	Yes
Battery Type	3 x 1.5v AA cells
Battery Life Tx / Rx	40 / 200 hours
Weight	390g
Cable Pull Strength	31kg
Colours	Matte Black
Operating Temperature	-20C to 40C
Output Sound Level	84dB
Water Resistance	Yes
Adjustable Mounting	Yes
ROHS Compliance	Yes
IP Compliance	Yes, IP57
EMC Compliance	Yes
Warranty	18 months
Part Number	07818B2

Optional Accessories

07841C
Throat Mic Headset

078511C
Hi Noise Headset

07842C
Sidewinder Headset

Lanyard or 360° Swivel Belt Clip Attachable

Breathing Apparatus Radio Headset

For Benelec BLP400 & Motorola XTS5000 Portables

BA Radio Headset
07864

BA Speaker Mic
07816X

Features

- Integrated Bone Conduction speaker + microphone in one element.
- Suitable to be used on most BA masks.
- Clear Audio through VSCM (Vibration Sound Conveying Microphone) technology.
- IPX8 Rated solution.
- Excellent noise attenuation (100dB).
- FM versions on request.
- Rugged push/pull Nexus-type termination.

With Benelec's latest development of the vibration-type bone conduction mic (VSCM) and high output bone vibration speaker, the **Breathing Apparatus Radio Headset** ensures clear transmission even with the mouth covered by a mask, or in extreme noise environments.

It can be fitted to a wide variety of BA masks, and since it does not cover the ears, it allows the user to hear ambient sounds in high risk environments for increased safety.

PTT termination can be unplugged by one touch, even with large gloves on.

Bone Conduction element sits directly in front of the ear.

The element is rotatable and adjustable, ensuring proper contact.

07816 B2	Benelec BLP400 Series
07816 M3	Motorola XTS5000 Series

This solution can be developed for other brands and models on request

Ear Bone Microphone

For Motorola XTS3000/5000

The Benelec ear bone conduction microphone and speaker - with in-line water-proof PTT and wireless PTT - is the perfect communications solution for motor-bike riders. It allows the user to communicate while wearing a helmet, and still keeps the rider in touch even when the helmet is removed.

The bone conduction microphone also insulates the radio system from loud noise environments, such as wind noise in helmets. Several public safety clients have found this invaluable, including the NSW Ambulance and Police agencies.

07862M3

Features

- Integrated bone conduction microphone and earphone.
- Advanced sound reproduction technology via the mic enables a high quality of communication.
- Earplug cover made of highly elastic silicone gel with an ergonomic design that allows more comfort during long-term use.
- Suitable for use in high noise environments, eg. high wind noise (wind speed: 75Km/h) or high ambient noise (90db).
- High strength Kevlar re-enforced wires can endure severe bending and pulling.
- Unique IP67 rated in-line PTT and second wireless bike-mounted PTT, also IP67 rated.

This solution can be developed for other brands and models on request

Bluetooth Headset

07872X (Direct Termination)
07872H (H Termination)

Bluetooth Wireless Headset

Features

- Up to 8 hours of operation via integrated rechargeable battery.
- Rapid transmission eliminates audio lag.
- Complete kit with plug adaptors for recharging.
- PTT volume control on ON/OFF housing (60x20x15mm).
- Compact design.
- Up to 15M range between wireless devices.
- Integrated attachment clips on devices.
- Various earpiece options on request.

Radio Interface

Other earpieces are available on request

Universal Rapid Chargers

Versatile Options to Suit Most Radio Models

Perfect for disaster relief, public safety, rental fleets and just about any radio user. Charge six different batteries with or without radio attached. Space saving design with dual power source allows you to charge your radios anywhere. Now when the power goes out, take it out to the car and keep on charging! **All of our universal charger models utilise our fully interchangeable adapter cup system. See following page for all available options.**

- Anodized aluminum casing and side caps
- Dimensions: 540x190x125mm
- Rapid AC/DC 6 bank charger
- Tri-chemistry, AC or DC (12V) input
- Smallest & Lightest - 2.2kg
- 110/240V self switching for international use
- Sealed military grade interior power supply
- Huge range of adapter cups available
- Optional vehicle/wall mount brackets
- Optional 3m hard wire vehicle cable available
- Two year warranty

Six Bay Charger
0610530

(Requires x6 cup selection)

Three Bay Charger
0610532

(Requires x3 cup selection)

Single Bay Charger
0610534

(Requires x1 cup selection)

Single Bay Vehicle Charger
0610536

(Requires x1 cup selection)

Six Bay Wall Bracket
0610530W

Six Bay Vehicle Mount Kit
0610530V

Three Bay Wall Bracket
0610532W

Three Bay Vehicle Mount Kit
0610532V

Replacement DC Cable
06105301

3m Vehicle Hard Wire Kit
06105302

Universal Charger Cup Options

Brand	Models	Part #
MOTOROLA	GP300, P110, GP350, P1225/LS, LTS2000, GTX/LTR	0610538 M1
	HT750, HT1250LS, HT1550/LS/XLS, MTX850/LS, MTX950, MTX8250/LS, MTX9250, EX500, EX560, EX600, EX600XLS, GL200, PRO5150, PRO7150, PRO9150, PR860, Infinity P-1000, P1010, GP328, GP338, GP339	0610538 M3
	HT1000, MTX838, MTX1000, JT1000, MT1500, MT2000, MTS2000, MTX900, MTX9000, MTZ2000, MTX8000, MTXLS, XTS3000, XTS3500, XTS5000, PR1500, XTS1500, XTS2500	0610538 M5
	MOTO TRBO, XPR6300, XPR6500, XPR6350, XPR6380, XPR6550, XPR6580	0610538 M7
KENWOOD	Radio Models: TK190, TK278, TK260, TK360, TK270, TK272G, TK370, TK280, TK372G, TK380, TK290, TK390, TK480, TK2100, TK3100, TK3101, TK3130, TK3131, TK481, TK5400, TH-K2AT Battery Models: KNB14, KNB15, KNB16, KNB17, KNB17L, KNB20, KNB21, KNB22	0610538 K1
	Radio Models: TK250, TK350, TK253, TK353, TK430, TK431 Battery Models: KNB11, KNB12	0610538 K3
	Radio Models: TK2140, TK2160, TK3140, TK3160, TK2170, TK3170, TK2360, TK3360, TK3173, TH-072A, Nexedge NX200, Nexedge NX320 Battery Models: KNB24L, KNB25A, KNB26N, KNB35L, KNB40LC, KNB55L, KNB56N, KNB57L	0610538 K5
	Radio Models: TK2200, TK3200, TK2202, TK3202, TK2300, TK3300, TK3312, TK2312, TK2302, TK3302 Battery Models: KNB29, KNB30 KEN-4 supports these batteries when used only with the Ni-MH battery, the Li-ion battery requires KEN-6	0610538 K7
	Radio Models: TK2180, TK3180, TK5210, TK2180MPT, TK3180MPT, NX200, NX210, NX300, TK5220, TK5320, TK5410, TK5310, Nexedge NX410 Battery Models: KNB31, KNB32, KNB33L, I.S. battery KNB-41NC, KNB43L, KNB47L, KNB48L, KNB49PL, KNB50NC, KNB54N	0610538 K8
	Radio Models: TK2202, TK2212, TK3202, TK3212, TK2300, TK3300, TK3312, TK2312, TK2302, TK3302 Battery Models: KNB45L KEN-6 supports the slim Li-ion battery only, Ni batteries require KEN-4	0610538 K9
ICOM	Radio Models: IC-F3, IC-F4, IC-F3S, IC-F4S Battery Models: BP195, BP196	0610538 I1
	Radio Models: F30GS, F40GS, IC-F3GT, IC-F4GT, IC-F4GS, IC-F21, IC-F21S, IC-F22, IC-F30GT, IC-F40GT, IC-F30GS, IC-F40G, F11 Battery Models: BP208, BP209, BP210, BP211	0610538 I3
	Radio Models: IC-F50/F50V, IC-F60/F60V Battery Models: BP226, BP227, BP227FM	0610538 I5
	Radio Models: IC-F70DT, IC-F70T, IC-F70DS, IC-F70S, IC-F80DT, IC-F80T, IC-F80DS, IC-F80S, IC-F9011T, IC-F9011S, IC-F9011B, IC-F9021T, IC-F9021S, IC-F9021B Battery Models: BP253, BP254, BP254FM, BP237	0610538 I7
	Radio Models: IC-F3001, IC-F4001 Battery Models: BP263, BP264	0610538 I9
Vertex Standard	VXD-720 Series	0610538 V1
	VX110, VX150,VX160, VX180, VX210,VX400, VX410, VX800, VXA12, VXA120, VXA200, BC90, BC95, VX414, VX417, VX420	0610538 V3
	Battery Only: VX821, VX871, VX824, VX874, VX829, VX879 Radio & Battery or Battery Only: VX921, VX971, VX924, VX974, VX929, VX979	0610538 V5
	Radio Models: VX354, VX351 (FNB-V96Li), VX230 Series Battery Models: FNB-V103Li, FNB-V104Li	0610538 V7
	Radio Models: VX450, VX451, VX454, VX459 Battery Models: FNB-V112Li, FNB-V113Li	0610538 V9
TAIT radio communications	Tait Radios: ORCA 5010, 5020, 5030, 5035, 5040, ORCA Elan, ORCA Excel, ORCA Eclipse M/A Com / Ericsson: Cougar 400P, Panther 400P, 600P, 625P	0610538 T1
	TP8100 Series	0610538 T2
	TP7110 Series	0610538 T4

Portable Radio Power Accessories

- Gold plated contacts
- 100% Japanese cells
- 12 month warranty

MOTOROLA

0610460B	Replacement Battery for GP328 NiMH 2300mAH
0610461B	Replacement Battery for GP300 NiMH 2300mAH
0610465B	Replacement Battery for XTS1500 / 2500 NiMH 2150mAH
0610466B	Replacement Battery for XTS1500 / 2500 NiMH 2700mAH
0610462B	Replacement Battery for XTS 3000 / 5000 NiMH 2700mAH
0610463B	Replacement Battery for XTS 3000 / 5000 NiMH 4000mAH
0610467B	Replacment Battery for MTP850 Li-Ion 2300mAH
0610469B	Belt Clip for Motorola XTS Batteries

Vertex Standard

0610411B	Replacement Battery for FNB-67Li Li-Ion 2500mAH for VX426/410/420/426
0610571B	Replacement Battery for FNB-83 NiMH 2300mAH for VX426/410/420/426/FT60/ HX370
0610414B	Replacement Battery for FNB-87Li Li-Ion 2500mAH for VX820 series

BENELEC

06105101	Replacement Battery for Benelec Li-Ion 1800mAH for BC400/BL500/BL520
06104504	Replacement Battery for Benelec Li-Ion 1700mAH for BL800
06104520	Replacement Battery for Benelec Li-Ion 1950mAH for BLP400
06104522	Replacement Battery for Benelec Li-Ion 3600mAH for BLP400

ICOM

06104701B	Replacement battery for Icom IC-F3/F3s/F4/F4s NiMH 2300mAH
06104703B	Replacement battery for Icom IC-F50/60 Li-Ion 1880mAH

KENWOOD

06104705B	Replacement battery for Kenwood TK260/360/2100/3100 NiMH 2150mAH
06104707B	Replacement battery for Kenwood TK280/380480/390 NiMH 2150mAH
06104709B	Replacement battery for Kenwood TK2140/3140/2160/3160 NiMH 2150mAH

Other brands and models available on request

Radio Antenna RF Adaptors

JP to BNC
(Icom)
04361

2.5mm threaded to BNC socket
(Motorola GP328)
04362

SMA plug to BNC socket
(Vertex)
0400401

SMA socket to BNC socket
(Benelec BL500)
0400402

Portable Radio Antennas

- Compact, high performance stub antenna
- Tuned bandwidth
- Flexible, rugged construction
- All termination types available to order
- Patented technology from Norway
- Made by Benelec in Australia

Part #	Radio Model	Frequency Band
02616MT	Motorola XTS5000	380-420MHz
02616MV	Motorola XTS5000	450-480MHz
02616MY	Motorola XTS5000	480-520MHz

This solution can be developed for other brands and models on request

Portable Radio Cases

BC400/BL500 Nylon Belt Loop
06107303

BC400/BL500 Leather Security Swivel
06107301

XTS5000 Nylon Security Swivel
06107387

XTS5000 Leather Security Swivel
06107385

Part #	Radio Brand	Supported Models	Description
06107301	BENELEC	BC400/BL500	Leather security swivel case /w window
06107303	BENELEC	BC400/BL500	Nylon belt loop case /w window, water resistant
0610752	BENELEC	BL800	Leather security swivel case
06107307	BENELEC	BLP400A	Leather security swivel case, full key
06107308	BENELEC	BLP400B	Leather security swivel case, 4 key
06107381	MOTOROLA	XTS2500	Leather security swivel case /w window + swivel belt clip
06107383	MOTOROLA	XTS2500	Nylon IP65 security swivel case /w window + swivel belt clip
06107385	MOTOROLA	XTS5000	Leather security swivel case /w window + swivel belt clip
06107387	MOTOROLA	XTS5000	Nylon IP65 security swivel case /w window + swivel belt clip
0610737	Vertex Standard	VX420/426	Leather security swivel case /w window
0610739	Vertex Standard	VX824/829	Leather security swivel case /w window
0610734	Vertex Standard	VX820	Nylon security swivel case, water resistant

Variations on design, brand and model are available on request

Portable Radio Audio Terminations

Suffix	Product Image	Radio Brand	Supported Radio Models
B1		RELM WIRELESS	DHP/GHP Series
B2		BENELEC Professional Wireless Solutions	BLP400 Series
		RELM WIRELESS	KNG Series Portables
E1		Entel	HX400 Series
E4		BENELEC Professional Wireless Solutions	BL500, BL520, BC400 Series
K1		KENWOOD	TK-208, 220, 240, 240D, 248, 250, 260, 260G, 270, 270G, 308, 320, 340, 340D, 348, 350, 353, 360, 360G, 370, 370G, 372G, 430, 431, TK-2100(Pro Talk), 2102(Pro Power), 2130(Pro Talk XLS), 2160, 3100(ProTalk), 3160, 3101(Free Talk XL), 3102(Pro Power), 3130(ProTalk XLS), 3131(Free Talk XLS)
K2		KENWOOD	TK-190, TK-280, TK-380, TK-385, TK-390, TK-480, TK-481, TK-2140, TK-2180, TK3140, TK3148, TK-3180, TK-5210, TK-5400, TK-5310, NX200/300
M1		MOTOROLA	GP68, GP88, GP300, GP308, GP350, P040, P080, P110, P1225, P1225LS, P2000, CP88, CP125, CP150, CP200, CT150, CT250, CT450, CT450LS, PRO2150, PRO3150, BPR40, EP450, MTH500, GTX, SP50, LTS2000, PR400
M3		EFJohnson TECHNOLOGIES	5100, 7700 Series
		MOTOROLA	HT1000, MTX838, MTX1000, JT1000, MT2000, MTS2000, XTS3000/Astro, MTX, XTS3500, XTS5000, MT2000, MTS2000, XTS3000, GP900, MTX1000, XTS2500, MTX8000
M4		BENELEC Professional Wireless Solutions	BL800 Series
		MOTOROLA	HT750, HT1250LS, HT1550XLS, MTX850LS, MTX950, MTX8250LS, MTX9250, PRO5150, PRO7150, PRO9150, PRO5350, PRO5450, PRO5550, PRO5750, PRO7350, PRO7450, PRO7550, PRO7750, GP328, GP338, GP329, GP339, PTX700, PTX760, PTX780, GP320, GP140, GP340, GP360, GP640, GP680, GP1280
M5		MOTOROLA	EX500, EX600, GL2000, PRO5150elite, PTX760plus, GP328plus, GP338plus, GP628plus, GP344, GP388
		SIMOCO	SRP9170/SRP9180
		HYT	TC-780, TC-380M/370M, TC-780M, TC-780, TC-610P
M6		MOTOROLA	GP900, GP9000, HT1000, JT1000, MT2000, MTS2000, MT6000, MTX838, MTX900, MTX900, MTX1000, MTX8000, MTX9000, MTX-LS, XTS2000, XTS2500, XTS3000, XTS3500, XTS5000/5100/7700
M7		MOTOROLA	Mototrbo, XPR6300 / 6500 / 6550, APX400 / 6000 / 7000
M9		MOTOROLA	MTH650, MTH800, MTH850
S1		ICOM	IC-F3, IC-F3S, IC-F4, IC-F4S, IC-F10, IC-F20, IC-H2IC-H6, IC-J12, IC-M5, IC-U12, IC-U16, IC-36FI, IC4088S, COBRA and RITRON Series
		maxon	SL25, SL55, SP-120/130/140
		uniden	UH040, UH042
		GME	TX6000, TX7000, TX670

Suffix	Product Image	Radio Brand	Supported Radio Models
S2		maxon	SP120, SP130, SP140, SL25, SL55, SP300, SP310, SP320, SP330, SP340, SL55+
S3		ICOM	IC-F3G, IC-F3GS, IC-G3GT, IC-F4G, IC-F4GS, ICF4GT, IC-F43GS, IC-F43GT, IC-F43TR, IC-F11, IC-F11S, IC-F21, IC-F21S, IC-F31
		GME	TX6100
S5		ICOM	IC-F30GT, IC-F40GT, IC-F50, IC-F51, IC-F60, IC-F61, IC-F30GS, IC-F40GS, IC-F41G, IC-F31G, M88, M87, IC-F70, IC-F80, IC-F3061, IC-F4061, IC-F70DT, IC-F70T, IC-F70DS, IC-F70S, IC-F80DT, IC-F80T, IC-F80DS, IC-F80S, IC-F3162, IC-F4162
S6		ICOM	IC-F3G, IC-F3GS, IC-F4G, IC-F4GS, IC-F11, IC-F21, IC-F31, IC-F33, IC-41S
S8		simoco	SRP9120, SRP9130, SRP9130 Plus
SP1		sepura	SRP2000, SRP3000, SRP3500, SRP3800
SP2		sepura	SRP2000, SRP3000, SRP3500, SRP3800
SP3		sepura	STP8000
T1		ZAI radio communications	TP8110, TP8115, TP8120, TP8135, TP8140, TP7110
T2		HYT	TC700
X1		NEXUS	7.3mm plug straight 4-pole
X2		NEXUS	7.3mm plug straight 5-pole
XF1		NEXUS	7.3mm plug straight 4-pole jack
XF2		NEXUS	7.3mm plug straight 5-pole jack
Y1		Vertex Standard	VX-10, VX-110, VX-160, VX-180, VX-210, VX-210A, VX-200, VX-300, VX-400, VX-150, VX-2R, VX-5R, FT-50, FT-60VXF-1, VX-410, VX-420, VX-426, VX-231, VX-351, VX-354
Y2		Vertex Standard	VX-600, VX-800, VX-900
Y4		Vertex Standard	VX-160, VX-180, VX-210, VX-210A, VX-410, VX-420, VX-426, VX-231, VX-351, VX-354
Y5		Vertex Standard	VX820/920 Series

OTHER BENELEC ACCESSORY CATALOGUES

benelec.com.au/pdf/CommsHeadsets.pdf

COMMUNICATION HEADSETS

benelec.com.au/pdf/AtexBlueLine.pdf

COMMUNICATION HEADSETS

benelec.com.au/pdf/PeltorCat.pdf

FULL RANGE

WARRANTY

Warranty on all Benelec accessories is as per our standard warranty terms and conditions which can be found on our website. Warranty periods from time of purchase are as follows:

Audio Accessories:	6 months
Cases & Portable Antennas:	6 months
Batteries:	12 months

CONSIDER BENELEC'S RANGE OF PROFESSIONAL PORTABLE RADIOS

BLP400A
136-174MHz
380-470MHz
440-520MHz
P25 CAI 1/4/5W
2048 Channels
Full Key

BLP400B
136-174MHz
380-470MHz
440-520MHz
P25 CAI 1/4/5W
2048 Channels
4 Key

BLP400C
136-174MHz
380-470MHz
P25 CAI 1/4/5W
2048 Channels
Full Key

BL520
66-88MHz
148-174MHz
403-520MHz
Analogue 5W
32 Channels

BL500
66-88MHz
148-174MHz
403-520MHz
Analogue 5W
255 Channels

BC400
UHF CB
477/403-520MHz
Analogue 5W
128 Channels

BENELEC Pty Ltd
Unit 2 / 581-587 Gardeners Rd
Mascot NSW 2020
T: 02 9364 7000
F: 02 9364 7099
E: inquiries@benelec.com.au

BENELEC QLD
Unit 6 / 11 Kenworth Place
Brendale QLD 4500
T: 07 3889 7711
F: 07 3889 6767
E: sales@comwide.com.au

BENELEC WA
Unit 7 / 13-15 Harvard Way
Canning Vale WA 6155
T: 08 6253 8324
F: 08 9455 2137
E: davidn@benelec.com.au

WWW.BENELEC.COM.AU